

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A graft polyol comprising
small particles having a particle diameter of from 0.05 to 0.7 μm and
large particles having a particle diameter of 0.4 to 5.0 μm , wherein said large particles
have a larger particle size than said small particles, and
wherein the graft polyol has a bimodal particle size distribution,
the peaks of the large and small particles measured by the Fraunhofer diffraction
method in combination with polarization intensity differential scattering do not overlap, and
the graft polyol has a total solids content of from 5 to 65% by weight
wherein the total content of the solids consists of a volume fraction of from 5 to 45%
of the small particles and a volume fraction of from 95 to 55% of the large particles, wherein
the volume fractions of the small and large particles sum up to 100%.

Claim 2 (Previously Presented): The graft polyol as claimed in claim 1, wherein the
peak of the small particles, measured by the Fraunhofer diffraction method in combination
with polarization intensity differential scattering, begins in a range of from 0.05 to 0.08 μm
and ends in a range of from 0.4 to 0.7 μm and the peak of the large particles, measured by the
Fraunhofer diffraction method in combination with polarization intensity differential
scattering, begins in a range of from 0.4 to 1.0 μm and ends in a range of from 1.2 to 5.0 μm .

Claim 3 (Canceled).

Claim 4 (Previously Presented): The graft polyol as claimed in claim 1, wherein the small particles have a diameter of from 0.1 to 0.5 μm and the large particles have a diameter of from 0.5 to 4.0 μm .

Claim 5 (Previously Presented): The graft polyol as claimed in claim 1, wherein the total solids content of the graft polyol is from 10 to 50% by weight.

Claim 6 (Previously Presented): The graft polyol as claimed in claim 1, wherein the total content of the solids consists of a volume fraction of from 10 to 40% by weight of the small particles and a volume fraction of from 90 to 60% by weight of the large particles, wherein the volume fractions of the small and large particles sum up to 100%.

Claim 7 (Previously Presented): A process for the preparation of the graft polyols as claimed in claim 1 comprising:

mixing (i) at least one graft polyol having a monomodal particle size distribution with small particles which have a diameter of from 0.05 to 0.7 μm with (ii) at least one graft polyol having a monomodal particle size distribution with large particles which have a diameter of from 0.4 to 5.0 μm to form a graft polyol having a bimodal particle size distribution wherein the total solids content of the graft polyol having a bimodal particle size distribution consists of a volume fraction of from 5 to 45% of small particles and a volume fraction of from 95 to 55% of large particles, wherein the volume fractions of the small and large particles sum up to 100%.

Claim 8 (Previously Presented): The process as claimed in claim 7, wherein the small particles have a particle diameter of from 0.1 to 0.5 μm .

Claim 9 (currently amended): The process as claimed in claim 7, wherein the large particles have a particle diameter of from 0.5 to 4.0 μm .

Claim 10 (Previously Presented): The process as claimed in claim 7, wherein the graft polyol having a bimodal particle size distribution has from 10 to 40% by volume of the graft polyol having a monomodal particle size distribution with small particles and from 90 to 60% of the graft polyol having a monomodal particle size distribution of large particles, wherein the volume fractions of the graft polyols having a monomodal particle size distribution with small and large particles sum up to 100%.

Claim 11 (Currently Amended): A process for the preparation of a graft polyol having a bimodal particle size distribution comprising as claimed in claim 1
small particles having a particle diameter of from 0.05 to 0.7 μm and
large particles having a particle diameter of 0.4 to 5.0 μm , wherein said large particles
have a larger particle size than said small particles, and
wherein the graft polyol has a bimodal particle size distribution,
the peaks of the large and small particles measured by the Fraunhofer diffraction
method in combination with polarization intensity differential scattering do not overlap, and
the graft polyol has a total solids content of from 5 to 65% by weight
wherein the total content of the solids consists of a volume fraction of from 5 to 45%
of the small particles and a volume fraction of from 95 to 55% of the large particles, wherein
the volume fractions of the small and large particles sum up to 100%
comprising preparing graft polyols in a semibatch process, wherein the initially taken
reaction mixture contains in each case at least one carrier polyol, a macromer and a graft

polyol having a monomodal particle size distribution, more than 3% by weight of the solids content in the resulting graft polyol consisting of the solids content of the graft polyol used in the initially taken reaction mixture and having a monomodal particle size distribution, and the amount of the macromer used in the initially taken reaction mixture is from 1 to 30% by weight, based on the total weight of the ethylenically unsaturated monomers wherein the amount is sufficient to form small particles in the further course of the reaction.

Claim 12 (Previously Presented): A process as claimed in claim 11, wherein the amount of macromer used in the initially taken reaction mixture is from 2 to 15% by weight, based on the amount of the ethylenically unsaturated monomers.

Claim 13 (Previously Presented): A process as claimed in claim 11, wherein the macromer is a polyol having an average molecular weight of more than 2 000 g/mol and a functionality of ≥ 2 , wherein said macromer has at least one terminal, polymerizable, ethylenically unsaturated group.

Claim 14 (Original): A process as claimed in claim 13, wherein the macromer is a polyol having an average molecular weight of more than 3 000 g/mol.

Claim 15 (Previously Presented): A polyurethane which comprises the graft polyol as claimed in claim 1.

Claim 16 (currently amended): A process for the preparation of polyurethanes comprising

reacting (a) organic and/or modified organic polyisocyanates with (b) graft polyols and, optionally (c) additional compounds having hydrogen atoms reactive toward isocyanates, in the presence of (d) catalysts, (e) optionally water and/or other blowing agents and, optionally (f) additional assistants and additives,

wherein the (b) graft polyols have a bimodal particle size distribution and a total solids content of from 5 to 65% by weight, which comprises small particles having a diameter of from 0.05 to 0.7 μm and large particles having a diameter of from 0.4 to 5.0 μm wherein said large particles have a larger particle size than said small particles,

the peaks of the large and small particles measured by ~~the~~ a light scattering method do not overlap,

and the total content of solids consists of a volume fraction of from 5 to 45% of the small particles and a volume fraction of from 95 to 55% of the large particles, wherein the volume fractions of the small and large particles sum up to 100%.

Claim 17 (new) The process of claim 16, wherein said light scattering method is measured by the Fraunhofer diffraction method in combination with polarization intensity differential scattering.